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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,615	08/06/2001	Shawn L. King	1558.00001	1426

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EXAMINER
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HAYES, JOHN W

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/923,615

Applicant(s)

KING ET AL.

Examiner

John W Hayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-10,12,13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-10,12,13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Status of Claims***

1. Applicant has amended claims 1, 2, 4, 6, 10 and 12-13 and canceled claims 3, 5, 11 and 14 in the amendment filed 04 March 2005. Thus, claims 1-2, 4, 6-10, 12-13 and 15-18 remain pending and are presented for examination.

### ***Response to Arguments***

2. Applicant's arguments filed 04 March 2005 have been fully considered but they are not persuasive.

3. Applicant argues that neither Houser et al nor Henderson et al disclose means for authenticating the creation of the document, but rather deal with the finished document after it has been fully rendered. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., authenticating the creation of the document) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, examiner submits that Houser et al disclose this feature since Houser et al disclose wherein a user creates a document such as a letter, an expense report, a travel document, a time card or other electronic form and is capable of inserting security information into the document at the time of creation in order to authenticate the document at a later time (Figure 1; Col. 7, lines 22-28; Col. 7, lines 45-53; Col. 11, lines 45-50).

4. Applicant further argues that Houser et al does not disclose separate unique barcodes for authenticating the document on a page by page basis at the time the document is rendered. Examiner submits that, although the claim recites generating a unique barcode for each specific page, there is no suggestion in the claims that the document must consist of multiple pages, thereby requiring a plurality of bar codes. When considering the claim limitations, examiner submits that the document may consist of only one page, and Houser discloses that the document digest may include paging details such as number of characters per page or in the document, the number of pages in the document, a hash value of

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the printed characters, other document specific information or any other combination (Col. 12, lines 40-55).

5. Applicant further argues that Houser does not allow for hand signing and faxing a document and further provides no motivation to do so. Applicant argues that since Houser et al deal with an already rendered electronic document, it teaches away from the invention. Examiner respectfully disagrees and submits that any hard copy or electronic document, even if it has been rendered, can be signed and faxed by a user. Houser et al does teach the use of a digital signature, but examiner submits that this does not negate that fact that the document may also be hand signed and faxed by a user (see Figure 7E of Houser et al, for example). Furthermore, applicant argues that applicant's invention retains the existing process of paper documents being signed by the author using a pen. However, the claimed invention is related to an electronic document management system for verifying the contents of an electronic document exchanged through a network.

#### ***Information Disclosure Statement***

6. The information disclosure statement filed 26 March 2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1-5 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houser et al, U.S. Patent No. 5,606,609 in view of Henderson et al, U.S. Patent Application Publication No. US 2002/0188845 A1 and Millard et al, U.S. Patent Application Publication No. US 2002/0007335 A1.

As per **Claims 1 and 10**, Houser et al disclose an electronic document management system for verifying the contents of an electronic document exchanged through a network, said contents defining said electronic document and comprising a predetermined electronic form template and variable data input by a user into said predetermined electronic form template, said system comprising:

(a) at least one data storage means for storing said user-input variable data and the template (Figure 1, 7A; Col. 7, lines 22-28; Col. 7 line 65-Col. 8 line 2; Col. 8, lines 33-40);

(b) a data capturing component for capturing user-input variable data defining an electronic document, wherein said data comprises at least said variable data, and forwarding said data for storage (Figure 1; Col. 7, lines 15-28; Col. 7, lines 60-65; Col. 11, lines 52-61; Col. 15, lines 20-25);

(c) a document digest generator for generating a unique document digest from said stored user-input variable data and said template defining said electronic document by applying a secure algorithm thereto, whereby said document digest is uniquely associated with said defined electronic document, and forwarding said document digest to the storage means for storage in association with said defined electronic document (Col. 4, lines 10-33; Col. 7, lines 60-65; Col. 10, lines 60-65; Col. 12, lines 40-54; Col. 14, lines 10-20 and 30-35; Col. 15, lines 20-25);

(d) a barcode generator for generating for each page of said electronic document a unique barcode associated with that specific page based on paging details identifying said page (such as number of pages or number of characters per page) and said document digest (Col. 12, lines 40-55; Col. 16, lines 62-67; Col. 17, lines 1-14; Col. 18 line 57-Col. 19 line 8; Figure 8)(Note that these limitations do not require a document with multiple pages);

(e) a document forwarding component for forwarding said defined electronic document with each said unique barcode added to said specific page of said electronic document associated therewith for use by a user (Col. 7 line 63-Col. 8 line 10; Col. 8, lines 35-40; Col. 15, lines 20-25);

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(f) a document receiving component for receiving from a user a signed electronic document comprising variable data and a barcode for each page of the document (Col. 4, lines 20-34; Col. 7 line 60-Col. 8 line 2; Col. 15, lines 25-28); and,

(g) a barcode verification component for determining the validity of each said barcode of said received electronic document wherein said document digest component of said barcode is compared to said stored document digest associated with said defined electronic document (Col. 4, lines 20-34; Col. 11, lines 45-50; Col. 15, lines 37-45; Col. 16, lines 2-38; Col. 21, lines 37-48).

Houser et al disclose that multiple security objects may be embedded in a single electronic document further suggesting that there may be at least one security object embedded on each page of a document (Col. 7, lines 60-65). Houser et al disclose wherein the user inputs variable data into a pre-determined electronic form template and the data defining the electronic document comprises variable data and the pre-determined electronic form template. Houser et al disclose that the data captured includes data in an electronic document created using any conventional application, for example, Word for Windows, Amipro, Powerpoint, Excel, Microsoft Windows Paintbrush, among numerous others and that the document may be any type of document (Col. 7, lines 15-28; Col. 11, lines 52-61). Houser et al further disclose an example of an expense report using Excel that includes both variable data as well as a pre-determined electronic form template (Figure 7A-7B). Houser et al also disclose comparing a document digest component embedded in a security object associated with the document with a document digest stored in memory (Col. 16, lines 15-22), and further disclose that a watermark is generated based upon the document digest and included along with the document (Col. 16 line 55-Col. 17 line 14), however, fail to explicitly disclose generating a barcode from the document digest and including the barcode on the electronic document. Houser et al does disclose that the generated watermark may be a barcode or other glyph that includes the document digest (Col. 18 line 62-Col. 19 line 10). Henderson et al disclose a system for validating value-bearing documents and further teach that it is known to generate a barcode based upon information such as a hash or digest of specific information and use the barcode in validating the information after it has been received (paragraph 0046). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the

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system of Houser et al and include generating a barcode based upon a document hash or digest and associate or include the barcode along with the document to facilitate validation of the document when it is received by another party. Henderson et al provide motivation by indicating that converting the hash or digest information into barcode format expedites the validation procedure by a validation module (0046).

Houser et al also fail to explicitly disclose validating user-input variable data, however, examiner submits that validating user-input data was well known in the art at the time of applicant's invention. Millard et al, for example, provides a teaching related to validating user-input variable data (0150-0160) and further is concerned with protecting electronic documents using digital signatures to confirm document authenticity and to prevent subsequent alteration (0278-0279). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the methods of Houser et al and Henderson et al and include a step of validating any user-input data to ensure that it meets any pre-established rules as taught by Millard et al.

As per **Claims 2 and 12**, Houser et al further disclose wherein a unique document number is generated for said defined electronic document, said document number is stored with said captured data and said barcodes are generated from said document digest and said document number (Figure 9B; Col. 4, lines 34-46; Col. 12, lines 45-54).

As per **Claims 4 and 13**, Houser et al fail to explicitly disclose wherein a unique document revision number is generated for said defined electronic document, said document revision number is stored with said captured data and said barcodes are generated from said document digest, said document number and said revision number. However, Houser et al does disclose that the content of the security object may vary depending on the information required by the features provided. The document digest may include document file name, document file path, the number of characters per page or in the document, the date and time that the document was saved as well as others (Col. 12, lines 40-54). Although Houser et al fails to specifically disclose a document revision number, examiner submits that this would have been obvious to one having ordinary skill in the art at the time of applicant's invention. It

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was well known that documents were frequently revised and included revision information in order to determine the current version of the document. Including this information in the document digest, or any other information related to the document would have been obvious to one having ordinary skill in the art in order to preserve this information when validating that the document was authentic.

9. Claims 6-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houser et al, U.S. Patent No. 5,606,609 and Henderson et al, U.S. Patent Application Publication No. US 2002/0188845 A1 as applied above, and further in view of Adobe Acrobat 3.0 Tutorial, published 1996, hereinafter referred to as Adobe.

As per **Claims 6 and 15**, Henderson et al disclose converting a message into a bar code PDF format, however, Houser et al and Henderson et al fail to specifically disclose a document image generator for generating an electronic image of said barcoded defined electronic document, wherein said document forwarding component forwards said electronic image. Adobe discloses a document image generator for generating an electronic image (such as a PDF) of a defined electronic document (Pages 2-7, capturing and cataloging a PDF). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Houser et al and Henderson et al and include the ability to generate a document image from the document in view of Adobe since this was a well known feature for conveniently transmitting electronic forms of documents from one party to another.

As per **Claims 7 and 18**, Houser et al disclose hand signatures (Figure 7E), however, fail to explicitly disclose wherein the received document has been hand signed and faxed by the user. However, examiner takes Official Notice that hand-signing and faxing documents was well known at the time of applicant's claimed invention and it would have been obvious to hand sign and fax a document in order to verify that somebody has approved the document or at least has read its contents signified by the signature.



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As per **Claims 8 and 16**, Houser et al further disclose digital exchange key generator for generating a unique digital exchange key associated with said defined electronic document, said generated unique digital exchange key being generated by applying said secure algorithm to said electronic image, and forwarding said digital exchange key for storage (Col. 4, lines 10-33; Col. 7, lines 60-65; Col. 10, lines 60-65; Col. 12, lines 40-54; Col. 14, lines 10-20 and 30-35; Col. 15, lines 20-25; Col. 16, lines 15-22).

As per **Claim 9**, Houser et al further disclose wherein said electronic document received by said document receiving component comprises a digital signature and said system further comprises a digital signature authentication component for authenticating said digital signature and a digital exchange key verification component for determining the validity of said received electronic document, wherein said digital exchange key verification component determines a digital exchange key by applying said secure algorithm to said received electronic document and comparing said determined digital exchange key to said stored unique digital exchange key associated with said defined electronic document (Col. 4, lines 10-33; Col. 7, lines 60-65; Col. 10, lines 60-65; Col. 12, lines 40-54; Col. 14, lines 10-20 and 30-35; Col. 15, lines 20-25; Col. 16, lines 15-22).

As per **Claim 17**, Houser et al further disclose whereby said electronic document received by said document receiving component comprises a digital signature, said method further comprising:

(a) authenticating said digital signature (Col. 7, lines 45-52; Col. 8, lines 8-12; Col. 12, lines 55-58; Col. 14, lines 43-46; Col. 15, lines 1-4 and 37-42; Col. 16, lines 30-34; Col. 21, lines 5-21); and,

(b) determining the validity of said received electronic document by applying said secure algorithm to said received electronic document and comparing the resulting determined digital exchange key to said stored unique digital exchange key associated with said defined electronic document (Col. 4, lines 10-33; Col. 10, lines 60-65; Col. 12, lines 40-54; Col. 14, lines 10-20 and 30-35; Col. 15, lines 20-25; Col. 16, lines 15-22).

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**Conclusion**

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

12. The prior art previously made of record and not relied upon is considered pertinent to applicant's disclosure.

- Zhao et al disclose digital authentication with analog documents and teach techniques for protecting the security of digital representations, and of analog forms made from them. Zhao teaches scanning analog forms and outputting to OCR software and generating a digest
- Smith discloses a method for authenticating documents and the originator or signer of the document

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- Baxter discloses a method for collecting and authenticating electronic signatures and documents signed thereby using digests
- Poore et al disclose a transaction card and teach that it is known to store a message digest on a barcode
- Kocher discloses a method for confirming, timestamping and archiving documents using FAX machines
- Carr et al disclose printing and validating of self validating security documents.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hayes whose telephone number is (571)272-6708. The examiner can normally be reached Monday through Friday from 5:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammell, can be reached on (571)272-6712.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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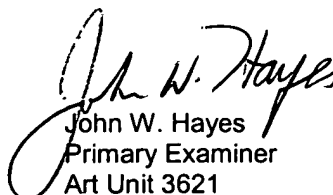
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Hand delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

  
John W. Hayes  
Primary Examiner  
Art Unit 3621

May 5, 2005